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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/610,933	06/30/2003	Josh Hogan	10002759.4	2541

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EXAMINER	
CHU, KIM KWOK	

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/610,933	HOGAN, JOSH	
	Examiner	Art Unit	
	Kim-Kwok CHU	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Appeal Brief filed on 7/20/2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1 and 7* is/are allowed.

6)☒ Claim(s) *6 and 8* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *6/30/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/542,404.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Remarks

1. Applicant's Appeal Brief filed on July 20, 2005 have been fully considered. A newly found art is cited to reject Claims 6 and 8.

The newly found art of Spruit et al. discloses the following features which are claimed by the Applicant:

(a) spatial features in form of lands, grooves, and servo pattern (Figs. 8-10); and

(b) data set with write timing in form of long and short marks with space in between the marks as illustrated in Fig. 3C.

Claim Objections

2. Claim 5 is objected to because of the following informalities:

(a) in claim 5, line 10, the term "lowest" should be changed to --lower-- because there are only two error rates to compare; and

(b) similarly, in claim 5, line 12, the term "lowest" should be changed to --lower-- because there are only two error rates to compare.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless --*
> *(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

4. Claim 6 is rejected under 35 U.S.C. § 102(b) as being anticipated by Spruit et al. (U.S. Patent 5,617,399).

Spruit teaches a method of adjusting write timing for an optical disc having all of the steps as recited in claim 6. For example, Spruit teaches the following:

(a) as in claim 6, writing a data set (test data), with write timing 30, 31, at an area on an optical disc 1 (Figs. 2 and 3C; test data with various domain lengths as write timing are written);

(b) as in claim 6, the optical disc 1 has spatial features arranged in accordance with the data set (Figs. 1a and 1b; lands, grooves and servo pattern are spatial features of the disc; column 3, lines 35-39);

(c) as in claim 6, reading the data set from the optical disc 1 (Fig. 5; step S4);

(d) as in claim 6, determining a read error rate for the data set (Fig. 5; step S5; column 7, lines 46-48);

(e) as in claim 6, adjusting the write timing (Fig. 2; modulating means 16 (data's timing/length is controlled by the modulator); and

(f) as in claim 6, repeating the proceeding steps until the read error rate is less than a predetermined value (Fig. 5; step S5; column 7, lines 22-25).

5. Claim 8 is rejected under 35 U.S.C. § 102(b) as being anticipated by Spruit et al. (U.S. Patent 5,617,399).

Spruit teaches a method of adjusting write timing for an optical disc having all of the steps as recited in claims 1-4. For example, Spruit teaches the following:

(a) as in claim 8, writing a data set (test data), having a known error rate ER as a function of write timing 30, 31, at an area on an optical disc 1 (Fig. 5; test data with various domain lengths as write timing are written and its error rate is calculated by step S4; the error rate is a result of the test pattern);

(b) as in claim 8, the optical disc 1 has spatial features arranged in accordance with the data set (Figs. 1a and 1b; lands, grooves and servo pattern are spatial features of the disc where test pattern is written; column 3, lines 35-39);

(c) as in claim 8, reading the data set from the optical disc 1 (Fig. 5; step S4);

(d) as in claim 8, measuring a read error rate ER for the data set (Fig. 5; step S4; data reading operation is loop again under new settings and new error rate is obtained in step S4); and

(e) as in claim 8, comparing the read error rate to the known error rate as a function of write timing (Fig. 5; read error rate ER from loop back operation and known error rate ER from test pattern are compared to ACC which provides an indirect comparison of read error rate and known error rate).

Allowable Subject Matter

6. Claims 1-5, and 7 are allowable over prior art.

7. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 1, the prior art of record fails to teach or fairly suggests a data writing method having the following steps:

(a) writing a data set with a write timing on an optical disc;

(b) the optical disc has spatial features that distort an analog read data signal and the distortion varies as a function of write timing;

(c) the data set has a characterized read error rate as a function of write timing at the area that has the spatial features; and

(d) adjusting the write timing based on comparing the read error rate of the data set and the characterized read error rate as a function of write timing.

As in claim 5, the prior art of record fails to teach or fairly suggests a data writing method having the following steps:

(a) writing a data set with a write timing;

(b) writing the data set at an area on an optical disc that has spatial features;

(c) the spatial features is arranged in accordance with the data set;

(d) reading the data set from the optical disc;

(e) determining a first read error rate for the data set;

(f) adjusting the write timing;

(g) writing the data set at the area on the optical disc that has spatial features and reading the data set from the optical disc;

(h) determining a second read error rate for the data set;

(i) selecting a lower read error rate among the first and second read error rates; and

(j) choosing a write timing corresponding to the lower read error rate.

As in claim 7, the prior art of record fails to teach or fairly suggests a data writing method having the following steps:

(a) writing a first and second data set with a write timing;

(b) writing the first and second data set at areas on an optical disc that has spatial features that distort an analog read data read signal;

(c) the distortion varying as a function of write time;

(d) reading the first and second data set from the optical disc;

(e) determining a first and second read error rate for the data set;

(f) selecting a lower read error rate among the first and second read error rates; and

(g) comparing the first and second error rates; and (j) adjusting the write timing based on the comparison of the first and second error rate.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fuji (6,310,846) is pertinent because Fuji teaches a recording system having a write intensity control means based on a test pattern.

Kubota et al. (5,841,747) is pertinent because Kubota teaches a recording system having a write intensity control means based on a test pattern.

Kurita et al. (5,831,943) is pertinent because Kurita teaches a recording system having a write intensity control means based on a test pattern.

9. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry. Or:

(571) 273-7585, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application should be directed USPTO Contact Center (703) 308-4357; Electronic Business Center (703) 305-3028.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

Kim-Kwok CHU

kc 2/22/06

Examiner AU2653
February 22, 2006

(571) 272-7585

William Korzuch